

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028977 A1

(51) International Patent Classification⁷: **F26B 17/12**

(21) International Application Number:
PCT/AU2004/001319

(22) International Filing Date:
24 September 2004 (24.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003905237 25 September 2003 (25.09.2003) AU

(71) Applicant (for all designated States except US):
MADDINGLEY BROWN COAL PTY LTD [AU/AU];
267 Hawthorne Road, Caulfield, Victoria 3161 (AU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WILSON, David**

[AU/AU]; 3 Oakbank Street, Newport, Victoria 3015 (AU).

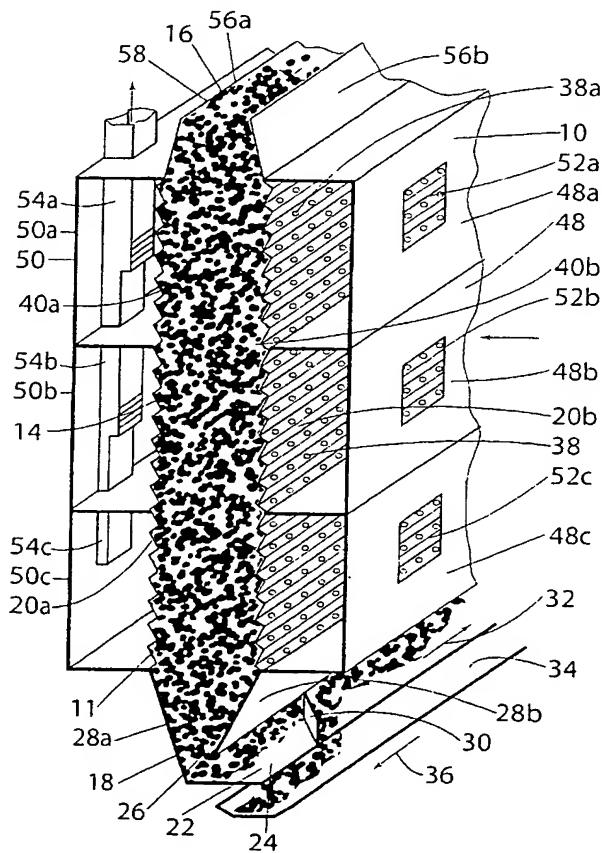
(74) Agents: **ROBERTS, Mark, K. et al.**; Davies Collison Cave, 1 Nicholson Street, Melbourne, Victoria 3000 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: DRYER, DRYING METHOD AND DRYING PLANT



(57) Abstract: The invention provides a dryer for drying particulate material, comprising at least one substantially vertical elongate container having an upper inlet (56a, 56b) for receiving a charge of moisture containing particulate material; a lower outlet (22) for discharging dried particulate material, whereby said particulate material travels under the influence of gravity from said inlet to said outlet; at least one substantially vertical gas permeable wall (20a, 20b) through which a drying gas can pass to contact said particulate material; said dryer also comprising at least one plenum (48, 50) on an exterior surface of said at least one gas permeable wall, covering ingress (38a) and egress openings within said at least one gas permeable wall.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*